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- Oxychlorination catalyst composition and an oxychlorination process using it.
- © Oxychlorination catalyst composition comprising a mixture of metallic chlorides carried on a support therefor, wherein said mixture consists essentially of a mixture of copper chloride, magnesium chloride, and potassium chloride. Also the oxychlorination of ethylene to 1,2-dichloroethane using such a catalyst composition.

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Cu:Mg:K atomic ratio of 1:0.1 to 1.0:0.1 to 1.0.

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- 6. Oxychlorination catalyst composition according to any one of the preceding claims wherein the support material thereof is particulate alumina.
- 7. Oxychlorination catalyst composition according to claim 6 wherein the alumina is eta and/or gamma alumina.
- 8. Process for the oxychlorination of ethylene to 1,2-dichloroethane in which the oxychlorination reaction is performed using an oxychlorination catalyst compositon comprising a mixture of metallic chlorides carried on a support therefor, wherein said mixture of metallic chlorides consists essentially of a mixture of copper chloride, magnesium chloride, and potassium chloride.
- Process according to claim 8 wherein the oxychlorination catalyst composition employed contains a level of copper within the range of from 3 to 9% by weight based on the weight of the catalyst composition.
- 10. Process according to either claim 8 or claim 9 wherein the oxychlorination catalyst composition employed contains a level of magnesium within the range of from 0.2 to 3% by weight based on the weight of the catalyst composition.
- 11. Process according to any one of claims 8 to 10 wherein the oxychlorination catalyst composition employed contains a level of potassium within the range of 0.2 to 3% by weight based on the weight of the catalyst composition.
- 12. Process according to any one of claims 8 to 11 wherein the oxychlorination catalyst composition employed provides a Cu:Mg:K atomic ratio of 1:0.1 to 1.0:0.1 to 1.0:
- 13. Process according to any one of claims 8 to 12 wherein the support material of the oxychlorination catalyst composition employed in the process is particulate alumina.
- 14. Process according to claim 13 wherein the alumina of the catalyst composition used in the process is eta and/or gamma alumina.
- 15. Process according to any one of claims 8 to 14 wherein the catalyst composition is employed as a fluidised bed or a fixed bed of particles.

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## **EUROPEAN SEARCH REPORT**

EP 89 31 2719

	DOCUMENTS CONS	IDERED TO BE RELEVA	NT	
Category	Citation of document with i	Indication, where appropriate, assages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X.	DD-A- 249 008 (VE BITTERFELD) * Abstract; page 2, example 1 *		1,8	B 01 J 27/138 B 01 J 27/10 C 07 C 17/156 C 07 C 19/045
Y	EP-A-0 057 796 (IC * Abstract; page 3, 1-14 *	CI) , lines 7-14; claims	1-14	
Y	EP-A-0 278 922 (EN * Abstract; page 1, 2, lines 19-23; cla	NICHEM) , lines 30-61; page aims 1-9 *	1-14	
Α	EP-A-0 206 265 (BA	ASF)		
D,A	US-A-4 069 170 (BI	AKE et al.)		
				TECHNICAL FIELDS SEARCHED (Int. CL.5)
				B 01 J C 07 C
		•		
The present search report has been drawn up for all claims				
THI	Place of search E HAGUE	Date of completion of the search 30-01-1990	LO	Examiner CONTE C.

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
 Y: particularly relevant if combined with another document of the same category
 A: technological background
 O: non-written disclosure
 P: intermediate document

T: theory or principle underlying the invention
E: earlier patent document, but published on, or after the filling date
D: document cited in the application
L: document cited for other reasons

&: member of the same patent family, corresponding document

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